recent Templeton Crocker Expedition. Dr. H. L. Mason in the capacity of "Keeper of the Plant Morgue" spoke briefly of his interest

in the future of the University of California Herbarium.

The lecture of the evening was given by Dr. D. T. MacDougal of the Carnegie Institution of Washington, the subject being "Features of Growth in Monterey Pine." Dr. MacDougal demonstrated the dendrograph, by means of which he has been enabled to keep accurate record of the activity of the cambium of this tree over a period of The Monterey pine, he pointed out, lives a hand-to-mouth existence, storing starch for a very limited time only. The cambium sheath has no periodicity, does not become fatigued, and continues its activity whenever temperature conditions are favorable. Activity ceases at 8 degrees Centigrade. Having seen the evidence, his hearers are likely to remember that each of the more than three million needles of an average tree of this species produces during the three years of its active life the equivalent of the wood contained in three toothpicks. The efficiency of the cambium of this pine allows a rapid, almost phenomenal growth whenever conditions are favorable. The speaker's stimulating subject and informal manner invited discussion, and there were several anecdotes of the prowess of this California conifer. In New Zealand where there are extensive plantations, a mature crop of timber may be harvested three times during the century.

Eighty-two members and guests attended the dinner which was planned by Dr. and Mrs. H. L. Mason.—E. K. CRUM.

## PLANT ALIENS AT QUINCY

## DAVID D. KECK

Man, in his migrations over the earth, has carried his civilization with him. He delights in the possession of familiar objects whose presence serves as a reminder of that civilization he has relinquished in order to pluck an existence from untried and virgin soils. By his very nature, the pioneer must possess a fortitude, stoicism and disregard for the personal comforts of life which are qualities most of us lack. Yet, in the heart of every man there lingers at least some trace of sentiment which, in the pioneer, causes him to carry strange objects into the wilderness. This is often accomplished with great difficulty and the cherished belongings may be peculiarly ill-fitted to their new

Everyone recalls those bright flowers that surrounded his childhood home and enjoys the sentiment bound up with them. So it is not strange that garden flowers have been among the prominent objects to migrate with first settlers to new frontiers, regardless of the fact that the flora of the new region may far surpass that which was left behind. Other cultivated plants of even more importance to the pioneer are those useful as food for man and beast. These have been very freely carried about the globe. In addition, certain plants of traditional, but perhaps more or less fanciful medicinal value are frequently introduced to new localities by colonists. The tansy, Tanacetum vulgare, of the following list may owe its wide distribution to an ancient belief that its seeds were effective agents in ridding the intestinal tract of parasites. Of course, too, there are the inevitable weeds which follow rapidly in the footsteps of civilization

and mark the disturbances in the native vegetation.

The writer, in company with Dr. and Mrs. Jens Clausen of the Carnegie Institution of Washington, spent over three days early in July, 1932, at Quincy. This little town is the county seat of Plumas County and is located in American Valley on the west flank of the northern Sierra Nevada at 3500 feet elevation. Quincy lies at the edge of the very extensive meadow of American Valley through which flows Spanish Creek, a tributary of the Feather River. Our first survey of the flora at Quincy impressed us with the exceptionally large number of European or cosmopolitan plants growing there. Dr. Clausen, comparing the scene with his native Denmark, commented that he could easily suppose he were in a northern European meadow in which there were a few California weeds. Consultation with Jepson's Manual showed us that many of these species were specifically indicated to occur at Quincy.

Inquiries addressed to a few residents of Quincy disclosed the fact that American Valley had been largely settled by Swiss and German families. One resident, Mr. Schneider, told us that his mother had brought a hanging basket of Lysimachia nummularia across the plains from Kansas in a covered wagon. This member of the Primulaceae is particularly adapted for use in hanging baskets because of its beautiful trailing stems closely beset with large yellow bowl-shaped flowers. It was our informant's impression that this hanging basket Lysimachia was the ancestor of the very numerous colonies of this species that now spot the meadow of American Valley and which, we were told, have spread to some extent, at least, into the surrounding woods.

The origin of the first human colonists seems to offer ample ex-

The origin of the first human colonists seems to offer ample explanation of the fact that, of the plants we collected, those which are not native to the region are all common species in Middle Europe. We did not detect any plant immigrants from the eastern United States or from the Mediterranean region. Incidentally, we paid very little attention to the Monocotyledons and probably there are at least some Mediterranean grasses at Quincy.

Possibly the following four species have not been previously

catalogued as members of the California flora:

Lysimachia nummularia L. is very thoroughly established, as stated above. There is a sheet at the University of California Herbarium collected by Mrs. Norman D. Kelley "near Quincy" in 1914. No other material seen from California.

TANACETUM VULCARE L. (Chrysanthemum tanacetum Karsch) is also well established at Quincy and, in addition to the author's collection, was collected there in 1912 by H. M. Hall, who observed it was "common in waste places all through American Valley." Appar-

ently this species has become naturalized also in Humboldt County along the road between Fortuna and Fernbridge (Kildale 2250, Dudley Herbarium). Seemingly very rarely naturalized in western North America.

CHRYSANTHEMUM PARTHENIUM (L.) Bernh. is sparingly established north of Spanish Creek, near Quincy, well away from human habitations. Additional locations were found in the University of California Herbarium: Diablo Canyon, San Luis Obispo County; north side of Mt. Shasta; Alta Loma Ranch, Howell Mountain, Napa County. It is often quite impossible to judge from herbarium labels whether such plants, frequently cultivated, have really become naturalized at a given locality.

Myosotis versicolor (Pers.) Smith has become established in the meadow of American Valley but only one colony of this species was observed. This Myosotis is apparently quite thoroughly naturalized in northern Oregon west of the Cascades as well as in the eastern United States and it should be expected in California. It has been collected at Eureka (Tracy 827, University of California Herbarium, fide Bracelin).

RANUNCULUS REPENS L. we found well established in the meadow at Quincy and are not aware that it has been previously reported from the Sierra Nevada.

We also collected the following well-established European introductions at Quincy:

Dactylis glomerata L.
Polygonum persicaria L.
Polygonum convolvulus L.
Sisymbrium altissimum L.
Sisymbrium sophia L.
Lepidium perfoliatum L.
Trifolium pratense L.
Trifolium hybridum L.
Trifolium repens L.

Myosotis scorpioides L.
'Nepeta cataria L.
Taraxacum vulgare L.
Chrysanthemum leucanthemum L.
Anthemis cotula L.
Centaurea cyanus L.
Cirsium arvense Scop.
Cirsium lanceolatum (L.) Scop.
(observed only).

The writer is indebted to Mrs. H. P. Bracelin for looking up distributions in the Herbarium of the University of California.

Carnegie Institution of Washington, Division of Plant Biology, Stanford University, California.

## NOTES AND NEWS

Reprints have been received of "A Study of the Genus Podaxis" by Elizabeth Eaton Morse. This interesting and previously little known fungus has been the subject of an extended study carried on at the University of California. The most ample collections were obtained from the Colorado Desert. Twelve excellent plates accompany the text. (Mycologia 25:1-33, pls. 1-12.—1933).

<sup>&</sup>lt;sup>1</sup> Hall 9385, not collected by us.